Appendix I Environmental Checklist

For the Chollas Creek Metals Total Maximum Daily Loads

California Regional Water Quality Control Board, San Diego Region

Environmental Checklist

1. Project title

Amendment to the Water Quality Control Plan for the San Diego Basin (9) to Incorporate Total Maximum Daily Loads for Copper, Lead and Zinc in Chollas Creek (Resolution No. R9-2006-0075).

2. Lead agency name and address

California Regional Water Quality Control Board, San Diego Region, 9174 Sky Park Court, Suite 100, San Diego, CA 92123-4340

3. Contact person and phone number

Benjamin Tobler, Water Resource Control Engineer (858) 467-2736

4. Project location

Chollas Creek, San Diego County, California

5. Project sponsor's name and address

California Regional Water Quality Control Board, San Diego Region 9174 Sky Park Court, Suite 100, San Diego, CA 92123-4340

6. General plan designation

Not applicable

7. Zoning

Not applicable

8. Description of project

As required by section 303(d) of the federal Clean Water Act, the San Diego Water Board has prepared Total Maximum Daily Loads (TMDLs) for copper, lead and zinc in Chollas Creek. The purpose of the TMDLs is to attain and maintain applicable water quality objectives for copper, lead and zinc and to protect the beneficial uses. The major source of metals to Chollas Creek comes from urban runoff. All sources of metals must comply with the load and wasteload allocations, which are set equal to water quality criteria define d in the California Toxics Rule further reduced by a margin of safety. The San Diego Water Board will amend the Basin Plan to include TMDLs for copper, lead and zinc, an Implementation Plan, and a schedule for achieving compliance with the wasteload and load allocations.

9. Surrounding land uses and setting

Chollas Creek is a highly urbanized watershed. See section 5.2.1 of the Technical Analysis for a detailed discussion of the land uses of the Chollas Creek Watershed.

10. Other public agencies whose approval is required

State Water Resources Control Board

Office of Administrative Law U.S. Environmental Protection Agency

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental resource categories identified below are analyzed herein to determine whether the proposed TMDL Basin Plan amendment would result in adverse impacts to any of these resources. None of the categories below are checked because the proposed TMDL Basin Plan amendment is not expected to result in "potentially significant impacts" to any of these resources.

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

\boxtimes	Aesthetics	Land Use Planning
	Agriculture Resources	Mineral Resources
$\overline{\boxtimes}$	Air Quality	Noise
$\overline{\boxtimes}$	Biological Resources	Public Services
	Cultural Resources	Recreation
	Geology/Soils	Transportation/Traffic
	Hazards & Hazardous Materials	Utilities/Service Systems
	Hydrology/Water Quality	Mandatory Findings of Significance
On th	e basis of this initial evaluation:	
<u> </u>	I find that the Proposed Project CO environment,	ULD NOT have a significant effect on the
<u> </u>	C I	roject could have a significant effect on the mificant effect in this case because revisions in greed to by the Project proponent.
<u> </u>	I find that the Proposed Project MA environment.	AY have a significant effect on the
<u> </u>	"potentially significant unless mitigone effect: (1) has been adequately applicable legal standards, and (2) based on the earlier analysis as described as the second standards."	AY have a "potentially significant impact" or gated" impact on the environment, but at least analyzed in an earlier document pursuant to has been addressed by mitigation measures eribed on attached sheets. An EPORT is required, but it must analyze only the

I find that although the Proposed Fenvironment because all potentially signifing an earlier EIR or NEGATIVE DECLAR (b) have been avoided or mitigated pursua DECLARATION, including revisions or Proposed Project, nothing further is required EVALUATION OF ENVIRONMENTAL	icant effects RATION pur int to that ear mitigation me red.	(a) have been a suant to applica lier EIR or NE casures that are	nalyzed adec able standard GATIVE	Juately I s, and
IMPACT	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
I. AESTHETICS Would the Project:				
a) Have a substantial adverse effect on a scenic vista?				×
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				×
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		×		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				×
II. AGRICULTURE RESOURCES: In determin significant environmental effects, lead agencies ma and Site Assessment Model (1997) prepared by th model to use in assessing impacts on agriculture a	ay refer to the (e California De	California Agricu epartment of Con	ıltural Land E ıservation as a	valuation
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				×
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				×
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-				×

POTENTIALLY SIGNIFICANT POTENTIALLY UNLESS SIGNIFICANT

IMPACT

MITIGATION INCORPORATION IMPACT

LESS THAN SIGNIFICANT

NO IMPACT

IMPACT agricultural use?

III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control the District may be relied upon to make the following determinations. Would the Project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?				×	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				×	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				×	
d) Expose sensitive receptors to substantial pollutant concentrations?		×			
e) Create objectionable odors affecting a substantial number of people?				×	
IV. BIOLOGICAL RESOURCES – Would the Pr	roject:				
a) Have a substantial adverse effect, either directly, or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulators, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				×	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		×			
c) Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				×	
d) Interfere substantially with the movement of any				×	

IMPACT native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				×
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				×
V. CULTURAL RESOURCES - Would the Projection	ect:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5?				×
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?				×
c) Directly or indirectly destroy a unique paleontological resource of site or unique geological feature?				×
d) Disturb any human remains, including those interred outside of formal cemeteries?				×
VI. GEOLOGY AND SOILS – Would the Projec	t:			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				×
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				×
ii) Strong seismic ground shaking?				×
iii) Seismic-related ground failure,, including liquefaction?				×
inqueraction:				×

IMPACT iv) Landslides?	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	No Impact
b) Result in substantial soil erosion or the loss of topsoil?				×
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?				×
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform building Code (1994), creating substantial risks to life or property?				×
VII. HAZARDS AND HAZARDOUS MATERIA	ALS – Would th	e Project:		
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				×
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				×
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				×
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				×
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?				×
f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?				×
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				×

IMPACT	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				×
VIII. HYDROLOGY AND WATER QUALITY	– Would the P	roject:		
a) Violate any water quality standards or waste discharge requirements?				×
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?				×
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				×
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which results in flooding on- or off-site?				×
e) Create or contribute runoff water which exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
f) Otherwise substantially degrade water quality?				×
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				×
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				×
i) Expose people or structures to a significant risk of loss, injury or death involving flooding,				×

IMPACT including flooding as a result of the failure of a	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	No Impact
levee or dam? j) Inundation by seiche, tsunami, or mudflow?				×
IX. LAND USE AND PLANNING – Would the H	Project:			
a) Physically divide an established community?				×
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? c) Conflict with any applicable habitat				×
conservation plan or natural community conservation plan?				×
X. MINERAL RESOURCES – Would the Project	et:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				×
b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				×
XI. NOISE – Would the Project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				×
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				×
c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?				×
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?		×		
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use				×

Appendix I

Chollas Creek Metals TMDL

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IMPACT airport, would the Project expose people residing or working in the Project area to excessive noise levels?	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?				×
XII. POPULATION AND HOUSING - Would the	ne Project?			
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				×
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				×
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				×
XIII. PUBLIC SERVICES				
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for any of the				
public services: Fire protection? Police protection? Schools? Parks? Other public facilities?				X X X
XIV. RECREATION				
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				×
b) Does the Project include recreational facilities				×

IMPACT or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	No IMPACT
XV. TRANSPORTATION/TRAFFIC - Would the	ne Project:			
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio to roads, or congestion at intersections?				×
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion/management agency for designated roads or highways?				×
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				×
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				×
e) Result in inadequate emergency access?				×
f) Result in inadequate parking capacity?				×
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				×
XVI. UTILITIES AND SERVICE SYSTEMS – V	Would the Proj	ect?		
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				×
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				×
c) Require or result in the construction of new storm water drainage facilities or expansion of				×

IMPACT existing facilities, the construction of which could cause significant environmental effects?	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	No IMPACT
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?				×
e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?				×
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?				×
g) Comply with federal, state, and local statutes and regulations related to solid waste?				×
XVII. MANDATORY FINDINGS OF SIGNIFIC	CANCE			
a) Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number of restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				×
b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects)?				×
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				×

Discussion of Possible Environmental Impacts and Appropriate Mitigation Measures

Depending on the BMPs chosen for implementation to comply with the TMDL, the project may result in potential adverse environmental impacts unless mitigation is incorporated into the BMP. Adverse environmental impacts are more often associated with treatment control BMPs rather than source control BMPs. Examples of potential impacts and mitigation associated with treatment control BMPs that might be implemented are discussed below. Keep in mind that the Basin Plan amendment does not specify the BMPs to be implemented by the dischargers, but rather, allows the dischargers to select BMPs to meet load and wasteload reductions of copper, lead and zinc in Chollas Creek.

Part I. Aesthetics c) Question: Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Answered "Potentially Significant Unless Mitigation Incorporation"

The construction of structural BMPs might result in adverse impacts to aesthetics. In order to mitigate potential impacts, BMPs should be designed when feasible to maintain or create habitat, recreational areas and green spaces, as well as properly designed, maintained and sited. Since in-creek diversions should not be used as BMPs, there should be no adverse impacts on aesthetics resulting from construction of concrete-lined basins or treatment facilities within the creek.

Part III. Air Quality d) Question: Would the project expose sensitive receptors to substantial pollutant concentrations?

Answered "Potentially Significant Unless Mitigation Incorporation"

The construction of structural BMPs might adversely affect air quality. Potential impacts are likely to be limited and mostly short-term in nature. Impacts may be mitigated through measures such as limiting hours and amount of construction, eliminating excessive idling when vehicles are not in use, limiting construction during periods of poor air quality, and/or using alternative fuel vehicles rather than diesel fuel vehicles. Any impacts to air quality, both short-term and long-term, would be subject to regulation by the appropriate air pollution control agencies under a separate process.

Part IV. Biological Resources b) Question: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Answered "Potentially Significant Unless Mitigation Incorporation"

In order to remove metals during dry weather, diversion systems may be put into place in Chollas Creek. While the use of diversion systems during dry weather may result in decreased metal concentrations in the creek, the removal of water destined to enter the creek from storm drains could alter the hydrology of the stream and result in adverse impacts to aquatic life dependent on the stream. Mitigation to lessen any such impacts may involve returning diverted treated water into the creek in the same location, and at the temperature and flow velocity to maintain the creek's hydrograph hydrology. Diversion systems should be properly maintained to ensure that they function appropriately and do not result in adverse environmental impacts.

Potential adverse impacts may also result from the use of treatment control BMPs that increase the likelihood of vectors and pests. For example, constructed basins and vegetated swales may develop locations of pooled standing water that would increase the likelihood of mosquito breeding. Mitigation may involve the prevention of standing water through the construction and maintenance of appropriate drainage slopes and through the use of aeration pumps. Mitigation for vectors and pests should involve the use of appropriate vector and pest control strategies and maintenance such as frequent inspections to prevent adverse environmental impacts.

Certain types of treatment control BMPs such as infiltration trenches and infiltration basins may result in the accumulation of metals to potentially hazardous levels. The accumulation of metals in turn could lead to contamination of groundwater. Mitigation may involve regular inspections, monitoring, and maintenance including disposal of waste at appropriate landfills when necessary.

Another potential adverse environmental impact could result from the introduction and/or establishment of invasive species in wet ponds and bioretention BMPs. Vegetation should be chosen to help reduce or eliminate this possibility, and the BMPs should be maintained and inspected routinely to identify the establishment of any potentially invasive species.

In conclusion, implementation measures should be chosen to reduce metals loading to Chollas Creek. Efforts should first be aimed at source control and then at treatment control since treatment control BMPs have greater potential for adverse environmental impacts. Appropriate mitigation including frequent inspections and maintenance should be incorporated to reduce or eliminate any adverse environmental impacts.

Part XI. Noise d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Answered "Potentially Significant Unless Mitigation Incorporation"

Ambient noise levels might increase as a result of the construction of structural BMPs. However, increased noise levels directly resulting from construction should be limited and short-term, and may be mitigated through restricted or limited hours of construction.

¹ http://www.cabmphandbooks.com/Municipal.asp

Increased noise resulting from pumps used to control vectors or for the transport of water for treatment might be mitigated through engineering controls such as through insulation of pumps.

DETERMINATION

The implementation of these TMDLs will result in improved water quality in Chollas Creek and it tributaries and will not have significant adverse impacts to the environment. Specific projects employed to implement these TMDLs may have significant impacts, but these impacts are expected to be limited, short-term, or may be mitigated through design and scheduling. The Technical Report for these TMDLs and this checklist provide the necessary information pursuant to Public Resources Code section 21159 to conclude that properly designed and implemented BMPs or treatment systems will not have a significant adverse effect on the environment. Any of the potential impacts would need to be mitigated at a subsequent project level because any potential impacts would be associated with, and arise from, the design of a specific BMP or treatment system. At this stage, any conclusions regarding potential impacts associated with implementation projects would be speculative. Specific projects, which may have a significant impact, would be subject to a separate environmental review. The lead agency for subsequent projects would be obligated to mitigate any impacts identified in the project-specific environmental impact analysis, for example by limiting hours of excessive idling to mitigate impacts on air quality. To the extent the mitigation measures are subsequently deemed not feasible by agencies complying with these TMDLs, the necessity of implementing TMDLs required under the Clean Water Act to promote attainment of State water quality standards by removing the metals-related toxicity impairment from Chollas Creek (an action required to achieve the express, national policy of the Clean Water Act) outweigh the unavoidable adverse environmental effects that may be associated with subsequent projects undertaken to implement the TMDLs.

On the basis of this initial evaluation and technical analysis report for the TMDL, which

I find the proposed Basin Plan amendment may have a significant effect on the
environment. There are no feasible alternatives and/or mitigation measures
available which would substantially lessen any significant adverse impacts. See
the attached written report for a discussion of this determination.

John H. Robertus Date
Executive Officer